

TCTAGACTGGACAGCATCCACAAGAGAAGCACCTAGAAGGAGAATTTTCCCCAGCAGCTTGCTCAGGACCC
TGCAGGAGCCGCAGCTGGGACTGGACCTGCTGTTAACCATGAACTCTTCCTGCTGCCTGTCTTCTGTTTCT
CCGATGCTGCCTAACCTCTCTGAGCACCCCTGCAGCCCCCTCTGCCAGCAACCGGAGCGGCAGTGGGTTCTG
TGAGCAGGTCTTCATCAAGCCGGAGGTCTTCCTGGCTCTGGGCATCGTCAGTCTGATGGAAAACATCCTGG
TGATCCTGGCTGTGGTCAGGAATGGCAACCTGCACTCTCCCATGTACTTCTTCCTGTGCAGCCTGGCTGCA
GCCGACATGCTGGTGAGCCTGTCCAACCTCCCTGGAGACCATCATGATCGCCGTGATCAACAGCGACTCCCT
GACCTTGGAGGACCAGTTTATCCAGCACATGGATAATATCTTCGACTCTATGATTTGCATCTCCCTGGTGG
CCTCCATCTGCAACCTCCTGGCCATTGCCATCGACAGGTACGTCACCATCTTCTATGCCCTTCGGTACCAC
AGCATCATGACAGTTAGGAAAGCCCTCACCTTGATCGGGGTCATCTGGGTCTGCTGCGGCATCTGCGGCGT
GATGTTTCATCATCTACTCCGAGAGCAAGATGGTCATCGTGTGTCTCATCACCATGTTCTTCGCCATGGTGC
TCCTCATGGGCACCTATATATCCACATGTTCCTCTTCGCCAGGCTCCACGTCCAGCGCATCGCAGTGCTG
CCCCCTGCTGGCGTGGTGGCCCCACAGCAGCACTCCTGCATGAAGGGGGCTGTACCATCACTATCCTGCT
GGGTGTTTTTCATCTTCTGCTGGGCGCCTTTCTTCCTCCACCTGGTCTCATCATCACCTGCCCCACCAATC
CCTACTGCATCTGCTACACGGCCCATTTCAACACCTACCTGGTTCTCATCATGTGCAACTCCGTCATCGAC
CCCCTCATCTACGCCCTCCGCAGCCTGGAGCTGCGCAACACGTTCAAGGAGATTCTCTGCGGCTGCAACAG
CATGAACTTGGGCTAGGATGCCCCGTGGAGGTGTTCCACATCCAGCCAAGAGACAAAAACAACGCTCAGACG
GGACGTAAGGGGTGTTAGGAGCTGGAACGTGTGCTTGGCTTCGTCTGTAAGCTCGTGGCCCTTTGCAGACG
GGACACGGCGTAGGATGGGCTGTCTGTGAGGATCTGTGTGTGGGTAAGTCAGTTTGATCTAGCACATAGCC
TGGAAGAATCAGGCAAAGCAGCCCTGAGTGTATCTGTGTTTATTGCTAGGCACCCAGGGTTTGTGGCCCC
TGCTTGCTTATTGGCTTTGTACCAGTAACCTGCTGCTTCAAGCCAACCAGACCGGAGGGCTCTCGTGAGCAGA
AAGAGTGCTTAGACTTCCGGCAAGCATCCTGGCTCACAGCGGCCACCTCCTGACCACTACCGGGAGAGCTT
TGCACATATTCTGTGGGAGATTGAGTGAAGCCCTGAAAAACAATGTGATATTTGCTGCTCCCTTCCAGAACT
TACATCTGTGCCAGCCTCCCCGAACCCCTGCACAGAGACATGACCCCTTCTCCCTGTGCCGTGTTCATGG
TTGTTATTATTGTTGGAGTTTGTTCGTTAAAAATCTAAGCTT (SEQ ID NO:1)

MNSSCCLSSVSPMLPNLSEHPAAPPASNRSGSGFCEQVFIKPEVFLALGIVSLMENILVILAVVRNGLHS
PMYFFLCSLAAADMLVSLSNSLETIMIAVINSDSLTLQDFIQHMDNIFDSMICISLVASICNLLAIAIDR
YVTIFYALRYHSIMTVRKALTLIGVIWVCCGICGVMFIYSESKMVIVCLITMFFAMVLLMGTLYIHMFLF
ARLHVQRIAVLPPAGVVAPQQHSCMKGAVTITILLGVFIQWAPFFLHLVLIITCPTNPYCICYTAHFNTY
LVLIMCNSVIDPLIYAFRSLELRNTFKEILCGCNSMNLG (SEQ ID NO:2)

FIGURE 1

Underlined = deleted in targeting construct

Bold = sequence flanking Neo insert in targeting construct

TCTAGACTGGACAGCATCCACAAGAGAAGCACCTAGAAGGAGAATTTTCCCCAGCAGCTT
GCTCAGGACCCCTGCAGGAGCCGCAGCTGGGACTGGACCTGCTGTTAACCATGAACCTTTC
CTGCTGCCTGTCTTCTGTTTCTCCGATGCTGCCTAACCTCTCTGAGCACCCCTGCAGCCCC
TCCTGCCAGCAACCGGAGCGGCAGTGGGTTCTGTGAGCAGGTCTTCATCAAGCCGGAGGT
CTTCTTGGCTCTGGGCATCGTCAGTCTGATGGAAAACATCCTGGTGATCCTGGCTGTGGT
CAGGAATGGCAACCTGCACTCTCCCATGTACTTCTTCCTGTGCAGCCTGGCTGCAGCCGA
CATGCTGGTGAGCCTGTCCAACCTCCCTGGAGACCATCATGATCGCCGTGATCAACAGCGA
CTCCCTGACCTTGGAGGACCAGTTTATCCAGCACATGGATAATATCTTCGACTCTATGAT
TTGCATCTCCCTGGTGGCCTCCATCTGCAACCTCCTGGC**CATTGCCATCGACAGGTACGT**
CACCATCTTCTATGCCCTTCGGTACCACAGCATCATGACAGTTAGGAAAGCCCTCACCTT
GATCGGGGTCTATCTGGGTCTGCTGCGGCATCTGCGGCGTGATGTTTCATCATCTACTCCGA
GAGCAAGATGGTCATCGTGTGTCTCATCACCATGTTCTTCGCCATGGTGCTCCTCATGGG
CACCTATATATCCACATGTTCTCTTCGCCAGGCTCCACGTCCAGCGCATCGCAGTGCCT
GCCCCCTGCTGGCGTGGTGGCCCCACAGCAGCACTCCTGCATGAAGGGGGCTGTCACCAT
CACTATCCTGCTGGGTGTTTTTCATCTTCTGCTGGGCGCCTTTCTTCCTCCACCTGGTCTT
CATCATCACCTGCCCCACCAATCCCTACTGCATCTGCTACACGGCCCATTTCAACACCTA
CCTGGTTCTCATCATGTGCAACTCCGTCTGACCCCCCTCATCTACGCCTTCCGCAGCCT
GGAGCTGCGCAACACGTTCAAGGAGATTCTCTGCGGCTGCAACAGCATGAACCTGGGCTA
GGATGCCCGTGGAGGTGTTCCACATCCAGCCAAGAGACAAAAACAACGCTCAGACGGGAC
GTAAGGGTGTAGGAGCTGGAAGTGTGCTTGGCTTCGTCTGTAAGCTCGTGGCCCTTT
GCAGACGGGACACGGCGTAGGATGGGCTGTCTGTGAGGATCTGTGTGTGGGTAAGTCAGT
TTGATCTAGCACATAGCCTGGAAGAATCAGGCAAAGCAGCCCTGAGTGTCATCTGTGTTC
ATTGCTAGGCACCCAGGGTTTGTGGCCCCCTGCCTGCTTATTGGCTTTGTACCAGTAACTG
TGCTTCAAGCCAACCAGACCGGAGGGCTCTCGTGAGCAGAAAGAGTGCTTAGACTTCCGG
CAAGCATCCTGGCTCACAGCGGCCACCTCCTGACCACTACCGGGAGAGCTTTGCACATAT
TCTGTGGGAGATTGAGTGAAGCCCTGAAAACAATGTGATATTTGCTGCTCCCTTCCAGAA
CTTACATCTGTGCCAGCCTCCCCGAACCCCTGCACAGAGACATGACCCCTTCTCCCTGT
GCCGTTGTCATGGTTGTTATTATTGTTGGAGTTTGTTCGTTAAAATCTAAGCTT

FIGURE 2A

Gene Sequence
Structure *

296 bp

Sequence Deleted

519 bp

Size of CDS: 1675 bp



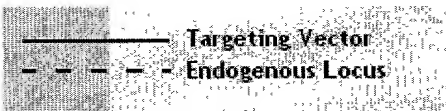
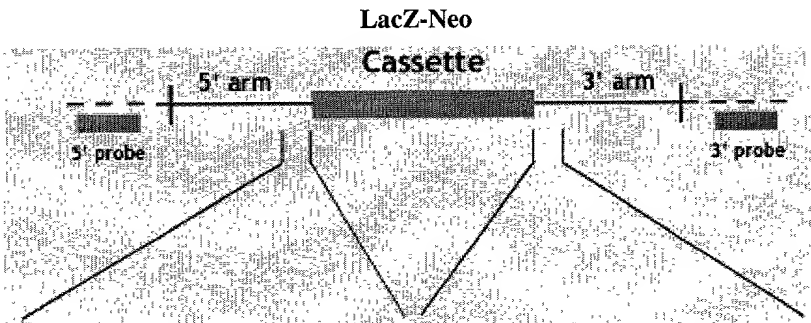
Targeting Vector* (genomic sequence)

Construct Number: 2787

Arm Length:

5': 1.6 kb

3': 4 kb



* Not drawn to scale

<p>5' >ACCTGCTGTTAACCATGAACT CTTCCTGCTGCCTGTCTTCTGTTT CTCCGATGCTGCCTAACCTCTCTG AGCACCCCTGCAGCCCCCTCCTGCCA GCAACCGGAGCGGCAGTGGGTTCT GTGAGCAGGTCTTCATCAAGCCGG AGGTCTTCCTGGCTCTGGGCATCG TCAGTCTGATGGAAAACATCCTGG TGATCCTGGCT<3' (SEQ ID NO:3)</p>	<p>5' >CATTGCCATCGACAGGTACGT CACCATCTTCTATGCCCTTCGGTA CCACAGCATCATGACAGTGAGGAA AGCCCTCACCTTGATCGGGGTCAT CTGGGTCTGCTGCGGCATCTGCGG CGTGATGTTTCATCTACTCCGA GAGCAAGATGGTCATCGTGTGTCT CATCACCATGTTCTTCGCCATGGT GCTCCTCATGG<3' (SEQ ID NO:4)</p>
--	--

FIGURE 2B